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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/016,906

Filing Date: December 14, 2001

Appellant(s): HICKSON ET AL.

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Scott D. Paul  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed January 30, 2007 appealing from the Office action mailed August 31, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-16, 18-21 and 23 rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,633,630 to Owens et al.

As concerns claims 2 and 23, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a published message at a message broker (figure 1; 12,40,32; column 7, lines 31-41-receives message from sender and holds and forwards the message to the receiver; column 4, lines 61-66-can be a single entity), referring to characteristics of the received message and subscriber-specified (figure 1; 36-is subscriber for this instance is person receiving the message; column 3, lines 20-35) quality of service requirements to determine an appropriate quality or service for onward transmission of the message (column 10, lines 1-8; column 7, lines 4-5; abstract lines 10-18); selecting a communication protocol in accordance with the determined quality of service (column 9, line 61-column 10, line 1; column 2, lines 24-27); and transmitting the message using the selected communication protocol (column 9, line 61- column 10, line 8);

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the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a transactional communication protocol at least for transactional messages which match subscriptions including said transactional message delivery requirement (column 9, line 61- column 10, line 8; column 10, line 40; column 11, line 66).

As concerns claim 3, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a published message at a message broker (figure 1; 12,40,32; column 7, lines 31-41-receives message from sender and holds and forwards the message to the receiver; column 4, lines 61-66-can be a single entity), referring to characteristics of the received message and subscriber-specified (figure 1; 36-is subscriber for this instance is person receiving the message; column 3, lines 20-30) quality of service requirements to determine an appropriate quality or service for onward transmission of the message (column 10, lines 1-8; column 7, lines 4-5; abstract lines 10-18); selecting a communication protocol in accordance with the determined quality of service (column 9, line 61-column 10, line 1; column 2, lines 24-27); and transmitting the message using the selected communication protocol (column 9, line 61- column 10, line 8); the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement (column 10, lines 28-34).

As concerns claim 4, the protocol selecting step comprises selecting a non-transactional communications protocol for any messages marked as non-persistent and for any messages for which matching subscriptions do not include said transactional message delivery requirement (column 9, line 61- column 10, line 8).

As concerns claims 5, 18, 20 and 21, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a published message at a message broker (figure 1; 12,40,32; column 7, lines 31-41- receives message from sender and holds and forwards the message to the receiver; column 4, lines 61-66-can be a single entity), referring to characteristics of the received message and subscriber-specified (figure 1; 36-is subscriber for this instance is person receiving the message; column 3, lines 20-30) quality of service requirements to determine an appropriate quality or service for onward transmission of the message (column 10, lines 1-8; column 7, lines 4-5; abstract lines 10-18); selecting a communication protocol in accordance with the determined quality of service (column 9, line 61-column 10, line 1; column 2, lines 24-27); and transmitting the message using the selected communication protocol (column 9, line 61- column 10, line 8); for communication between first and second message brokering systems in a multi-broker network, the first message brokering system is configured to access a repository (column 6, line 7) storing subscriber-specified quality of service requirements for subscriber programs which connect to the broker network/currently connected via the second message brokering system, and wherein the first message brokering system determines a quality of service for the communication by referring to the subscriber-specified quality of service requirements for the

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subscriber programs which connect/currently connected subset to the broker network via the second message brokering system (column 5, line 60-column 6, line 13).

As concerns claims 6 and 21, wherein the second brokering system sends to the repository aggregate quality of service requirements for the set of subscriber programs which connect to the broker network via the second message brokering system (column 6, lines 4-10).

As concerns claim 7, wherein each brokering system in a multi-broker network sends to its connected message brokering system aggregate quality of service requirements for the set of subscriber programs which are accessible via the brokering system (column 6, lines 4-10).

As concerns claim 8, wherein the second brokering system sends to the repository subscriber-specific quality of service requirements for each subscriber program which connects to the broker network via the second message brokering system (column 6, lines 4-10).

As concerns claim 9, wherein the second brokering system sends to the repository separate quality of service requirements for each of a plurality of different topics or topic groups (column 6, lines 4-10).

As concerns claim 10, the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement (column 10, lines 28-34).

As concerns claims 11 and 19, selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement (column 10, lines 28-34).

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As concerns claims 12 and 16, including applying one or more override policy rules to determine whether to override a specified quality of service when no communication connections are available which provide the specified quality of service (column 10, lines 3-8; no connections available by that provider that will not be listed, thereby overriding the previous list of available connections).

As concerns claim 13, wherein the override policy rules are message topic specific (column 11, lines 65-67).

As concerns claim 14, the override policy rules are subscriber specific (column 10, line 60).

As concerns claims 15 and 23, wherein the first and second message brokering systems are configured for establishing a plurality of communication connections there between, each connection providing a different quality of service (different based on rules and options established by the user), and wherein the selection of a communication protocol by the first message brokering system includes determining which of the plurality of connections are currently available for sending a message to the second brokering system and selecting a communication protocol provided by a currently available connection in accordance with the determined quality of service (column 10, lines 3-8).

#### **(10) Response to Argument**

Argument 1-

The Appellant argues, "Owens does not teach that the receiver 34 acts as an intermediary between two parties " (see Brief page 8, first paragraph). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features

upon which applicant relies (i.e., acts as an intermediary between two parties) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, the argument appears drawn to the claim limitation of “message broker” (see Brief: page 7). The claims are given their broadest reasonable interpretation and the claims do not set forth any particular definition for the term “message broker”. The Appellant argues the analysis and example of a stock broker and submits the broker as being “one who buys and sells” not one “who buys or sells”. It is unclear if the Appellant is interpreting the term as being an “intermediary”, which has not been claimed, regardless the receiver 34 of Owens performs both sending and receiving (see Owens: column 7, lines 49-50), which satisfies applicant’s definition of the term “broker”, which has not been claimed. The claim term defining structure has been interpreted in view of the functional language that has been associated with it as set forth in the claim. For example, claim 2 sets forth a “message broker” receiving a message (“receipt of a published message”). Therefore the prior art need disclose some element, labeled in the claim as a “message broker”, to receive a published message. The receiver 34 of Owens performs this function (see Owens: column 7, line 39).

In view of Appellant’s arguments the message broker (figure 1; 12,40,32; column 7, lines 31-41-receives message from sender and holds and forwards the message to the receiver; column 4, lines 61-66-can be a single entity) has been interpreted to more clearly be defined as the various devices and infrastructure (column 4, lines 44-50) that supports the users (message sender and message receiver; figure 1). Page 1 of Appellant’s specification recites, “network of

servers (“brokers”). The applicant has not recited the term servers in the claim to define the brokers. Furthermore elements 28 and 32 of Owens are servers.

#### Argument 2-

The Appellant argues “The limitation at issue is “subscriber-specified quality of service requirements,” which implies that the quality of service requirements for a message are specified by the subscriber/receiver of the message” (see Brief page 9, last paragraph-page 10, first paragraph) and “to be considered a subscriber of messages one of ordinary skill in the art, one must be receiving the messages” (see Brief page 9, last paragraph). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., are specified by the subscriber/receiver of the message; must be receiving messages) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). If the claim limitation “subscriber-specified” is to be interpreted as “specified by the user receiving messages”, Owens does disclose this limitation at least at column 3, lines 20-35, wherein the receiver indicates a preferred communication medium and selects options and rules. Therefore they are “subscriber-specified” and they affect the quality of service that the user is receiving, thus giving them options to change or select the service they desire.

### Argument 3

The Appellant has argued “the Examiner has not established that one of ordinary skill in the art would consider the filter and forward options taught by Owens as identically disclosing the claimed “quality of service requirements”” (see Brief: page 10, 2<sup>nd</sup> paragraph). The claims are given their broadest reasonable interpretation and the Appellant has not established any particular definition within the claims for the term “quality of service requirements” that would render the filter and forward options and rules (abstract; column 3, lines 24-25) and choice of communication mode (column 7, lines 4-5). The user can establish these requirements and affect the quality of the service the user is receiving. Furthermore, the Appellant has not set forth that these particular “quality of service requirements” of Owen are not equivalent to Appellant’s “quality of service requirements”, and the claims do not set forth any particular limitation to further define this limitation.

### Argument 5

The Appellant argues Owens does not disclose, “selecting a communication protocol in accordance with the determined quality of service” (see Brief: page 11). The communication protocols between the first and second message brokering systems are defined by the particular medium used, wherein each medium necessarily has a protocol associated with it and the communication protocol is dependent upon the selection of the communication mode. A protocol is a set of rules governing the format and transmission of data between computers. Since these computers are communicating there must necessarily be a particular protocol being used. When a particular communication mode is selected, which is associated with the “quality of service”,

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therefore a protocol is being selected since the protocol is dependent upon the particular communication mode being used. See also Owens: column 6, line 10-13, 16; column 7, lines 40-42; column 8, lines 32-42; column 10, lines 65-67.

#### Argument 6

The Appellant argues Owens does not disclose, "transmitting the message using the selected communication protocol" (see Brief: page 12, last paragraph). As addressed above Owens discloses the limitation of "selecting a communication protocol". The limitation of "transmitting the message" using the selected protocol is disclosed by Owens wherein Owens recites "*messages...delivered*" (column 9, lines 65-67) and "*in accordance with the preferences of both senders and receivers*" (column 9, line 67-column 10, line 1).

#### Argument 7

The Appellant argues Owens does not disclose "the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement" as recited in claim 2 (see Brief: page 13-page 14, 1<sup>st</sup> paragraph). The claims are given their broadest reasonable interpretation and although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. The examiner indicated Owens: column 10, lines 28-34, for addressing this particular limitation. In this passage Owens discloses message options for notifying the user immediately

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and having messages stored in a particular format for later retrieval. Columns 11 and 12 also expand upon the options (subscriber-specified) available. If the subscriber does not set forth a requirement for transactional delivery (which may include notifying immediately; mode such as a pager-column 12, line 13) then a non-transactional communication mode would be used (stored as email or voicemail).

#### Argument 8

The Appellant argues Owens does not disclose “the subscribe-specified quality of service requirements include an indication of whether transactional message delivery is required, and wherein the protocol selecting step comprises selecting a non-transactional communications protocol for messages for which matching subscriptions do not include said transactional message delivery requirement” (see Brief: page 14, 2<sup>nd</sup> paragraph). The claims are given their broadest reasonable interpretation and although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. The examiner indicated Owens: column 10, lines 28-34, for addressing this particular limitation. In this passage Owens discloses message options for notifying the user immediately and having messages stored in a particular format for later retrieval. Columns 11 and 12 also expand upon the options (subscriber-specified) available. If the subscriber does not set forth a requirement for transactional delivery (which may include notifying immediately; pager-column 12, line 13) then a non-transactional communication mode would be used (stored as email or voicemail).

#### Argument 9

The Appellant argues “the last two paragraphs in each of independent claims 5, 18 and 20-21 are not identical” and “the Examiner has not identified all of the claim elements”. The claims have been given their broadest reasonable interpretation and as such the claims may not be identical, however Owens discloses the claimed subject matter, which has been identified by the Examiner. The Appellant has not indicated which particular claim limitations in claims 5, 18 and 20-21 are not identical or indicated which particular limitations or claim elements the examiner has not addressed.

#### Argument 10

The Appellant argues “claim 23, the Examiner merely cited column 10, lines 3-8. This passage...is completely silent with regard to the communication protocols between first and second message brokering systems, and how a communication protocol for use between the first and second message brokering systems is selected” (see Brief: page 15). The communication protocols between the first and second message brokering systems are defined by the particular medium used, wherein each medium necessarily has a protocol associated with it. How a communication protocol for use between the first and second message brokering system is selected, is based upon the communication mode selected by the sender and receiver and the communication protocol is dependent upon the selection of the communication mode. Column 10, lines 3-8 discuss the different communication modes available to the users. The Examiner has addressed these limitations and the Appellant has not given any evidence of why the particular features of Owens cannot anticipate the claim limitations.

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

John B. Walsh

 JOHN WALSH  
PRIMARY EXAMINER

Conferees:

John B. Walsh 